



# THE WASSAIC KILNS

## PREFACE

To local officials planning to attend the September 1<sup>st</sup> site meeting at the Wassaic Charcoal Kilns ~

Some in attendance may have limited knowledge about kilns and their historical importance to the area.

To make the best use of the limited time allotted for the site meeting a brief summary of the history is being provided along with early period photos and documented shots of the restoration work currently underway.

For those seeking a more in-depth history a visit to the Amenia Historic Department located in Town Hall would be beneficial.

Thank you very much for your time and interest in this project. I look forward to seeing everyone on September 1<sup>st</sup> !

Sincerely,

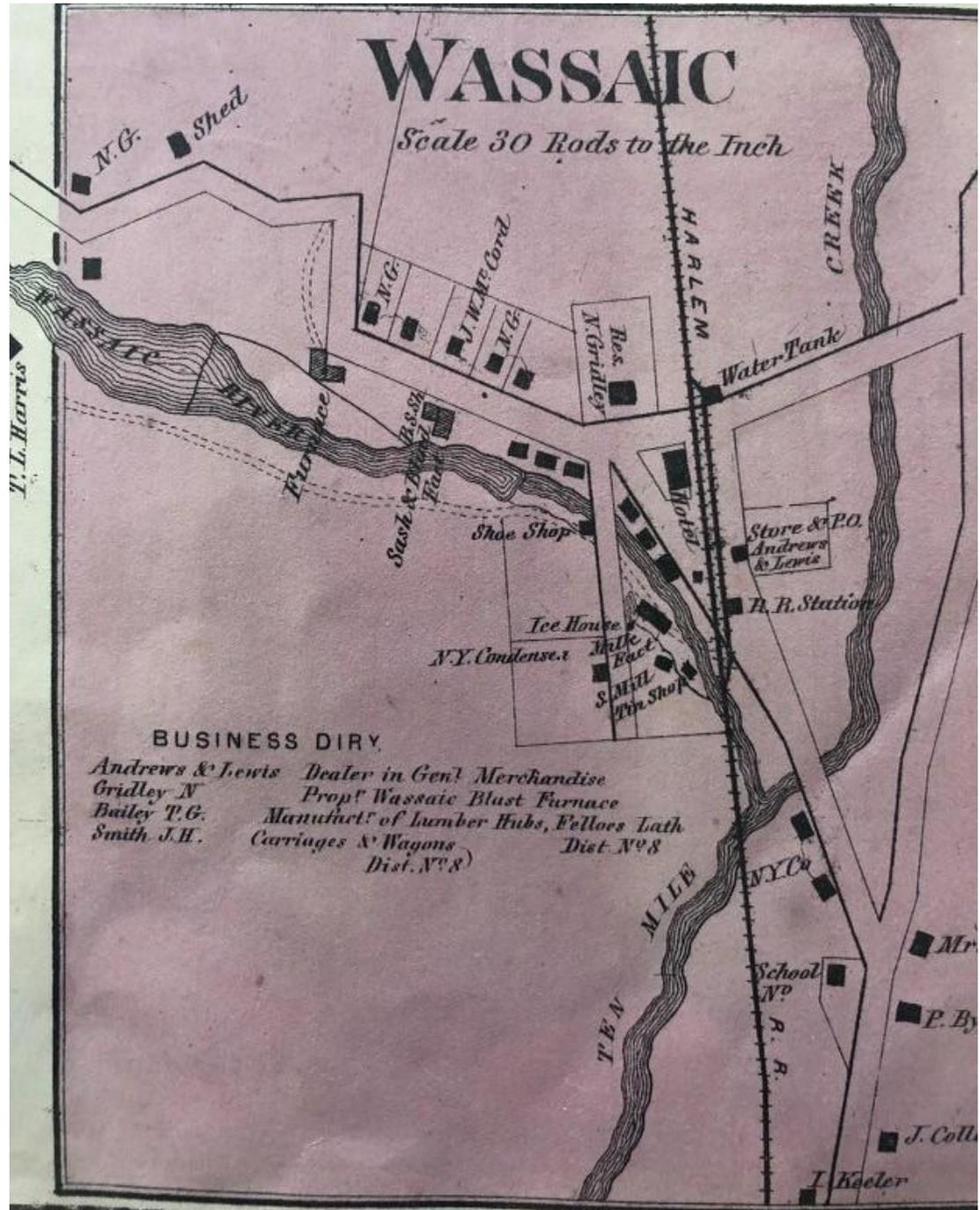
Bernie Leighton

## THE WASSAIC KILNS

Our future is determined by what we do now and what we learn from the past. Preserving the past is critical for the benefit of future generations. The Wassaic Kilns were at the forefront of the industrial revolution that became the foundation of what America is today.



MAP  
LOCATION



## Mines, Blast Furnaces Once Dotted Dutchess' Scenic Harlem Valley

By HELEN MYERS

Even when you know it, it's hard to realize that the beautiful Harlem valley, now essentially agricultural, was once an area of iron ore mines, blast furnaces and charcoal pits.

The mining and the making of pig iron began before the Revolution and reached its peak in 1880, when 61,637 tons of iron were made in Dutchess County. Two local mines were then said to be the biggest producers in the country.

William A. Benton was born just a little too late, in 1881, to see the industry in its heyday. However, since he lives in the heart of the iron country, he has been gathering information about the industry for years. His home, to which his family moved in 1805, is in Sinpatch, about three miles southeast of Wassaic.



*Poughkeepsie Journal Photo*  
WILLIAM A. BENTON in his home near Wassaic, once in the heart of Dutchess County's iron industry.

"This is ore country, iron country," he said, "the Harlem valley and adjoining Connecticut. There was one blast furnace at Dover Furnace, about six miles south of Dover Plains, one at Wassaic, one at Sharon Valley, just over the line in Connecticut. There was another at Irondale, a mile and one-half north of Millerton.

"There were plenty of others. One was at Ruid Pond. Another was at Copake Falls, in southern Columbia County, where New York State, Connecticut and Massachusetts come together. That was a big operation, the Copake Iron Works. The railroad station had the same name until about the turn of the century, when it became Copake Falls.

"There was another in Kent, Conn. There was one in Macedonia, about half way between here and Kent. That was in what is now Macedonia State Park. They used to figure that they couldn't locate a furnace unless there were four square miles of available timberland nearby to fuel it.

"Some in Clove Valley  
"There were furnaces in Clove Valley but I don't know about them. There must have been ore beds near Dover Furnace, but I don't know about them. Sylvan Lake is an old ore bed. There were ore beds and furnaces all over the eastern part of this country, but the only ones I know about were in northeastern Dutchess and nearby Connecticut."

All the furnaces had to have



*Poughkeepsie Journal Photo*  
STONE CHARCOAL PIT NEAR WASSAIC where charcoal was made for the Wassaic foundry. Such structures were rare. A charcoal pit was usually just a pile of cordwood, covered with dirt and sod.

ore. There was no ore bed at Wassaic, but there was one at Squabble Hole — the people were always squabbling there — about half way between Wassaic

and America, on the west side of the Valley.  
There was an ore bed at America. That was operated within Mr. Benton's memory. Ore Hill, east of Millerton, was an extensive ore bed, the largest average size at Sharon Station. There was a little one on the east side of Indian Lake. Davis ore bed was north of Lakeville.

When the ore was unloaded, a workman ran his shovel under the plank. That helped him get his shovel under the ore. It was

pieces could be shoveled in and out of a wagon fairly easily, he said, but the larger ones were hard to handle. So when a wagon of such ore was loaded, plank was laid from the tail gate to the bottom of the wagon, and the ore was placed on and around the plank.

When the ore was unloaded, a workman ran his shovel under the plank. That helped him get his shovel under the ore. It was

Ten

Years

Ago

April 19, 1954

Poughkeepsie property owners whose properties were to be removed to make way for the proposed north-south arterial highway through the city would be reimbursed on the basis of current market replacement values, City Manager Johnson told Harry Lewis, 2 Columbia St.

Mayor Stevens' plan for city operation of municipal parking lots had majority support of the Common Council. Council action was necessary to authorize installation and operation of parking meters in city owned lots.

The mercury rose to 77 degrees, and a south wind indicated that

was all covered with dirt and sod. The pit was lighted with a torch shoved into the kindling. Holes in the dirt covering at the bottom were for the admission of air, and one hole in top was for the exit of smoke.

"Those mountains are covered with pit bottoms," Mr. Benton said, "perfectly round places in the forest. Kick one and you will kick up charcoal dust, the powder they couldn't pick up."

French Headed Operation

"The colliers, the men who made the charcoal, were usually French in this area. They usually had a contract to produce the charcoal for so much a bushel, delivered on the teamster's head.

"The wagons for hauling the charcoal had high, hopper-shaped bodies. They were about 12 feet long and seven or eight feet tall, with sloping sides, larger at the top.

"The teamster drove to the pit for the charcoal. Then the teamster and the collier together packed it in baskets, and put it on the teamster's head. The teamster then walked up on a wooden horse, and dumped the charcoal from his head into the wagon."

more unseasonably warm weather was on the way.

Merritt, Chapman and Scott, New York City, submitted a low bid of \$4,495,477 for construction of two abutments and 22 piers on land and eight piers in the river for the Kingston-Rhinebeck bridge.



Twenty-five

Years

Ago

April 19, 1939

Extensive damage was caused to several homes in Red Hook village, including that of Supervisor Oliver E. Rider, by heavy rains which overflowed a large swamp and created a condition which was being investigated by health authorities.

Arthur L. Shepherd, County Farm Bureau agent, recommended that dairy farmers budget their income and expenses to minimize production losses during the current period of low milk prices. There is a difference, he declared, between necessities and things one may do without.

Legislation to provide a permanent public display of President Roosevelt's official papers on the Roosevelt estate in Hyde Park was introduced in Congress.

In accordance with a new law enacted that year by the legislature, County Treasurer Miller was preparing a new system by which tax bills for Dutchess County residents outside the cities of Poughkeepsie and Beacon could be paid in low installments.

Marshal T. Waterman was re-elected president of the Dutchess County Musical Association at the annual meeting in Vassar Alumnae House. Clara L. Hey was elected secretary; Ballur B. Van Kleeck, vice president; and Andrienne F. Sullivan, treasurer.



# HISTORY

Source: William G Pomeroy Foundation <https://www.wgpfoundation.org/>

The Wassaic Charcoal Pits are all that remain of the Reed, Gridley & Co. Iron Works, which remained open to the mid-to-late 1920s. The charcoal made in the pits was used to fire the Gridley Blast Furnace. Constructed of stone, the pits are about 30 feet in diameter with an entrance about six-feet high. It took about three weeks of slow burning to transform wood into charcoal. This charcoal was used for fuel in the blast furnace because of its low sulfur content which is harmful to iron.

More specifically, the survey reported that Gridley Mine, situated at Amenia adjacent to the old Amenia mine, opened in 1825. Proprietors in 1877 were N. Gridley and Son, Wassaic, NY. Operations in 1877 included one 15 horsepower engine, one tubular boiler 30" x 12", one No. 5 Knowles pump, 4" suction. Ore drawn up from the mine in carts was washed in a Newbould washer; transported in wagons two and one half miles to the furnace at Wassaic, where it was smelted into charcoal pig iron. Capacity in 1877 was 8,000 tons per year.

# HISTORY

In addition, more history about the mine was provided in the survey. In 1825 the N. Gridley and Son iron works –also referred to as the Deep Hollow Iron Factory or Wassaic Furnace –was established at the hamlet of Wassaic, immediately south of the project site. Nathaniel and Noah Gridley, Joseiah Reed, and Lemman Bradley built their works covering several acres, purchased the Amenia mine, and began iron production. When Gridley and Son built their furnace in 1826, it was 32 feet high and nine feet across. It was driven by an overshot wheel powered by the Wassaic Creek, measuring about 22 feet in diameter, and six feet at face. Two blowing cylinders provided for warm blast. Brown hematite ore from Amenia was used alone or mixed with other ore to produce iron. The process required about two tons of ore, limestone, and roughly 150 bushels of charcoal to produce one gross ton of iron.

In 1844 the iron works and mine was purchased by Noah Gridley and his son, William, who continued the venture. Over the 40 years that Gridley’s furnace was in operation, it was also noted by Amenia Historical Society, the hills surrounding Deep Hollow, including those in the western part of the project site, were heavily denuded in the harvest of timber for charcoal. According to the Survey history, “Noah Gridley’s wealth allowed him to essentially grow the community of Wassaic by building a chapel, luring Gail Borden’s

# HISTORY

Condensed Milk Factory to the town, and convincing Commodore Vanderbilt and Jay Gould to continue the train north. The village of Wassaic essentially became a company town, with Borden and Gridley bolstering the local economy.”

A historic photo provided by the Town of Amenia showed the 150-year old uncommon charcoal furnaces at the Wassaic end of Deep Hollow Road. Although they were no longer used, the 1898 photo showed them as they appeared.

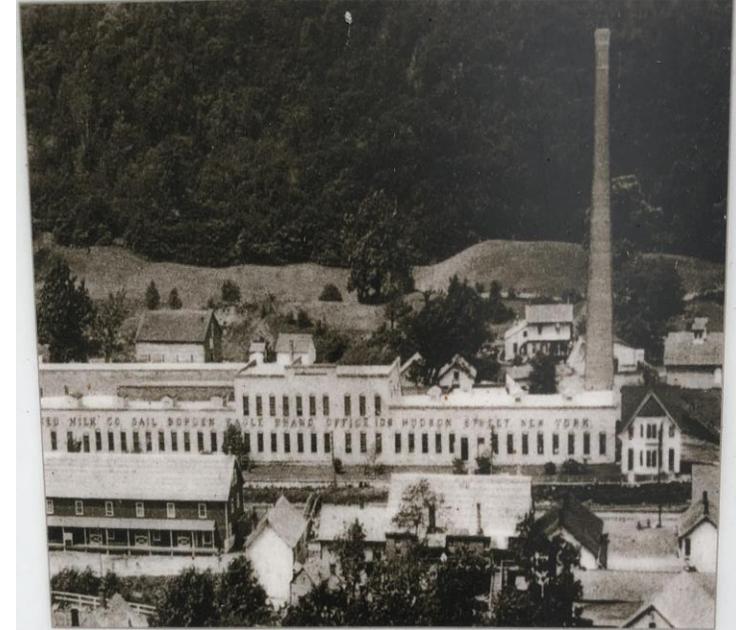


# HISTORY



## 4 Gridley Chapel

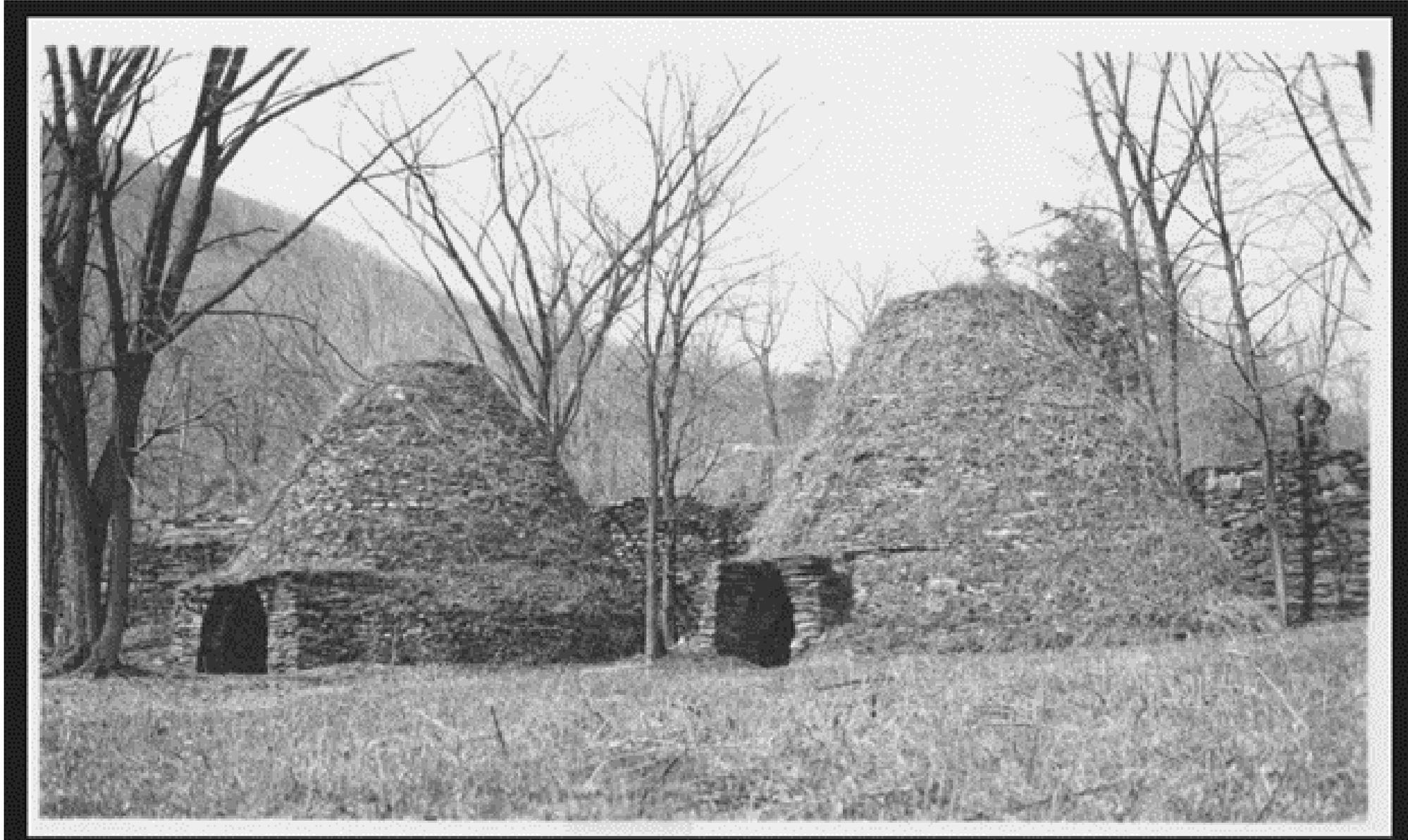
For years Noah Gridley's wife had been attending the South Amenia Presbyterian Church and taking neighbors in her carriage. Time came when there were just too many neighbors and not enough room to carry them all in her carriage. The solution? Build a chapel in Wassaic. In 1873 the Gridley's built a beautiful chapel for the hamlet which also provided Sunday school.



## 2 New York Condensed Milk Company

The Wassaic factory was founded in 1861 and built in cooperation with Noah Gridley and the financial backing of Jeremiah Milbank. The Wassaic factory was Gail Borden's third effort at canning condensed milk (Wolcottville, CT and Burrville, CT were the first two). The Wassaic factory was a primary supplier to the Union Army during the Civil War. The milk factory is closed and the building is now used by the Pawling Corporation. Gail Borden's Eagle Brand Condensed Milk is still sold today in supermarkets nationwide.

# HISTORY



# PROJECT WORK

**JUNE 2022**



**AUGUST 2022**



# PROJECT WORK



# PROJECT WORK



# PROJECT WORK



# PROJECT WORK



# PROJECT WORK



# PROJECT WORK



# PROJECT WORK



# PROJECT WORK



## CONTACT DETAILS

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